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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,920	08/20/2001	George Bellesis	06837-113001	7749

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EXAMINER
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OLSON, JASON C

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 12/10/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/933,920

Applicant(s)

BELLESIS ET AL.

Examiner

Jason C Olson

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2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,21,23,24,26 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 3-6,9-20,22,25 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7-8, 21, 23-24, 26 and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Leonhardt et al. (6084740).

Regarding claim 1, the Examiner notes that the preamble language appears to contradict the claim language because the preamble infers that the recording channel is positioned relative to the optical servo system and the claim infers that the optical servo system is positioned relative to the recording channel. Therefore, the Examiner interprets the breath of claim 1 to be a method of positioning a recording channel relative to an optical servo system. Leonhardt et al. teaches a method for positioning a read/write head (or recording channel) relative to an optical servo system (see col. 4, ln. 11-23) by determining the position (or first position) of the read/write head (see col. 4, ln. 25-40), processing a tape to determine position error (or lateral offset) of the read/write head (see col. 4, ln. 41-47 and col. 4, ln. 64-col. 5, ln. 5), then positioning the read/write head (to the second position) relative to the optical servo system to correct position error (see col. 5, ln. 5-40).

Regarding claim 2, the tape contains a plurality of parallel alignment servo tracks (or voids) (see col. 4, ln. 41-44 of Leonhardt et al.)

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Regarding claims 7-8, the read/write head is positioned in the direction needed to correct for position error (see col. 5, ln. 1-11 of Leonhardt et al. The relationship between the value of the offset (either positive or negative) and the direction in which the second position is related to the first position (either upward or downward) is not inventive because it does not produce an unexpected outcome and is considered designer's choice.).

Regarding claim 21, multiple beams of light are directed onto the tape and read/write head to determine optical signals (see col. 4, ln. 47-64 of Leonhardt et al.), a timing difference is determined between multiple optical signals (see col. 5, ln. 50-col. 6, ln. 20 and as depicted in figure 2 by Leonhardt et al. in items 701-705).

Regarding claim 23, using a correlation algorithm to compare the image (or optical signal) to a reference image (see col. 6, ln. 34-45 of Leonhardt et al.)

Regarding claim 24, the tape has formed on the second side thereof, a plurality of parallel alignment servo tracks that are used to position the read/write data head (see col. 4, ln. 11-23 and ln. 41-45 of Leonhardt et al.)

Regarding claim 26, the optical servo track is created by a laser (see col. 7, ln. 16-25 of Leonhardt et al.).

Regarding claims 28-29, Leonhardt et al. discloses a flexible tape having two edges with a magnetic front surface for data storage and a back surface containing optical servo marks for positioning a read/write head relative to an optical servo system (see col. 4, ln. 11-22 and 35-45), wherein the optical servo marks are formed by a laser that focus a beam of light into a beam expander, then onto the back of the tape (see col. 7, ln. 16-39).

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Regarding claims 30-31, Claims (30-31) have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Claims (30-31) however also recite further limitations of using a the stored image (or lateral offset) during tape travel to align the data track with the read/write head (see col. 6, ln. 25-49 of Leonhardt et al.).

### *Conclusion*


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lubratt (6433951) is cited for a magnetic storage tape with etched servo pattern. Saliba et al. (6558774) is cited for a multi-layer backcoating for magnetic tape. Basra et al. (2003/0086199) is cited for optical sensor to recording head alignment. Johnson et al. (2003/0043498) is cited for magnetic servo of a recording head. Saliba et al. (2002/0021524) is cited for optical apparatus for tracking a magnetic head.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C Olson whose telephone number is 703.305.8325. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on (703)308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

jco   
December 2, 2003

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
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